ABSTRACT

A wireless transmitter system for use in maintaining a wireless link with a remote transceiver includes a beamforming transmit antenna structure and a power control unit for controlling transmit power levels. The system determines the direction of the remote transceiver and then generates a transmit antenna beam in that direction. The power control unit then determines the antenna gain of the generated beam and uses the antenna gain information to adjust the transmit power level of the system so that it does not exceed government mandated limits. In one embodiment, the average transmit duty cycle of the system is also used to adjust transmit power. The system is capable of achieving a maximum transmit power without exceeding applicable power limits.

"Express Mail" mailing label number: <u>EL618477018US</u>
Date of Deposit: August 31, 2000

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.